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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,312	09/08/2003	John A. Manteiga	125896	9763

7590 04/28/2005  
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One Metropolitan Square  
St. Louis, MO 63102

EXAMINER

CASAREGOLA, LOUIS J

ART UNIT	PAPER NUMBER
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3746

DATE MAILED: 04/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/657,312

Applicant(s)

MANTEIGA ET AL.

Examiner

Louis J. Casaregola

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☒ Claim(s) 3,14-20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

### ***Objections To Claims***

Claims 3 and 14-20 are objected to under 37 CFR § 1.75(a) for the following reasons:

In claim 3, lines 5-6, "counter-counter direction" includes a typographical error and was obviously intended to be "counter-clockwise direction".

Claim 14 and related dependent claims 15-20 recite "a combustor upstream from said compressor" (claim 14, line 3). The cited language includes a transcription error since a gas turbine's combustor must be downstream of its compressor -- see the position of combustor 16 and compressor 14 shown in Figure 1.

### ***Claim Rejections - 35 USC § 102***

Claims 1, 2, 4-8, 11-16, 19 and 20 are rejected under 35 U.S.C. § 102(b) as being anticipated by Irwin.

The present claims read on gas turbine combustor assemblies of the type disclosed by Irwin. Attention is called to Figures 4 and 5; see combustor liner 53 and the surrounding casing structure comprising scroll duct 52 and air inlet 50. Note that the air openings (unnumbered) in liner 53 direct air uniformly around the liner as specified in claims 2, 7, 8, 15 and 16. Note also that the scroll duct has a cross section at its inlet

end (near inlet 50) which is larger than the cross section at the duct's discharge and/or opposite end as specified in claim 4, 5, 11, 12, 19 and 20.

With regard to claim 13, it is additionally pointed out that claimed reference to a reduction in circumferential thermal gradient is merely a desired result. If such a result is achieved by the claimed structure, the corresponding structure in the prior art can be presumed to achieve the same result.

Claims 1-3, 6-10 and 13-18 are rejected under 35 U.S.C. § 102(e) as being anticipated by Suenaga et al.

Suenaga discloses a further example of gas turbine combustor and scroll assembly. Attention is called to Figures 2 and 3; see combustor liner 50, the surrounding casing structure comprising scroll 60 and air inlet 90, and liner inlet openings 51. Note that the liner portion directly opposite the inlet (Fig. 3) constitutes a flow splitter that forms clockwise and counter-clockwise flows as specified in claims 3, 10, 17 and 18. Note also that the comment on claim 13 in the rejection over Irwin above is equally applicable to the rejection over Suenaga.

L. J. Casaregola  
571-272-4826 (M-F; 7:30-4:00)  
703-872-9306 FAX  
April 25, 2005

  
LOUIS J. CASAREGOLA  
PRIMARY EXAMINER

Art Unit: 3746

If repeated attempts to reach the examiner by telephone are unsuccessful, the art unit supervisor, Cheryl Tyler, can be reached at 571-272-4834.

Information regarding the status of this application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR, and status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).